

عنوان مقاله:

amathematical model for city logistics distribution network Design with the Aim of Minimizing Response Time

محل انتشار:

فصلنامه بین المللی مهندسی صنایع و تحقیقات تولید، دوره 28، شماره 1 (سال: 1396)

تعداد صفحات اصل مقاله: 11

نویسندگان:

farshad saeedi - *Department of Industrial Engineering, Iran University of Science and Technology*

ebrahim teimoury - *Department of Industrial Engineering, Iran University of Science and Technology*

ahmad makui - *Department of Industrial Engineering, Iran University of Science and Technology*

خلاصه مقاله:

The continuous increase in population in metropolises has caused major problems in delivering goods and urban services. City logistics models can be effective in solving these complexities. In addition to explaining concepts and definitions related to city logistics, this study presents a mathematical model for designing a city logistic distribution network with the aim of minimizing response time. This aim is optimal and may be efficient for emergency goods and services, especially at the time of crisis, as well as goods which require minimum delivery time. The network structure is so that the goods will be transferred through three levels: logistics centers around the city are the first level, second level is distribution centers within the city, and third level is sales terminals as demand areas. In fact, the goal is selecting a number of fixed sites for establishing city distribution centers. Demand is assumed to be probabilistic, and network modeling is conducted based on queueing theory. A numerical example is generated, and the results of solving using the BARON solver in GAMS software and model sensitivity analyses are explained. Results indicate the accuracy and validity of the proposed modeling. Finally, conclusions and suggestions for future studies are presented.

کلمات کلیدی:

City logistics, Urban freight Distribution, City distribution centers, Network design, Response time, Queueing theory

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/665719>

